

L Number	Hits	Search Text	DB	Time stamp
1	2	6363178.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:27
2	4	((("6363178") or ("6298173"))).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:33
3	4	("5457776" "5703628" "5880728" "6005679").PN.	USPAT	2004/05/14 16:27
4	2	6363178.URPN.	USPAT	2004/05/14 16:29
5	27	("4503556" "4741046" "4750209" "4817050" "4893188" "5001767" "5351314" "5436732" "5465304" "5479587" "5483622" "5555362" "5568571" "5588072" "5631984" "5680478" "5680479" "5699453" "5703962" "5748865" "5751849" "5757957" "5767978" "5774579" "5802524" "5848184" "5848191").PN.	USPAT	2004/05/14 16:29
6	1	6298173.URPN.	USPAT	2004/05/14 16:32
7	66128	(file or document) with (type or extension)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:35
8	12084	((file or document) with (type or extension)) and (reduc\$3 or compress\$3) with (file or document)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:36
9	1153	((file or document) with (type or extension)) and (reduc\$3 or compress\$3) with (file or document)) and application with (priorit\$3 rank\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:37
10	452	((file or document) with (type or extension)) and (reduc\$3 or compress\$3) with (file or document)) and application with (priorit\$3 rank\$3)) and rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:37
11	31	((file or document) with (type or extension)) and (reduc\$3 or compress\$3) with (file or document)) and application with (priorit\$3 rank\$3)) and rule with (compress\$3 reduc\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 16:44
12	19310	(storage near4 (capac\$4 size)) with (compress\$4 reduc\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:03
13	229	((storage near4 (capac\$4 size)) with (compress\$4 reduc\$5)) and (compress\$4 reduc\$5) with rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:03
14	0	((storage near4 (capac\$4 size)) with (compress\$4 reduc\$5)) and (compress\$4 reduc\$5) with rule) and insufficient with (space or memory)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:04
15	10	((storage near4 (capac\$4 size)) with (compress\$4 reduc\$5)) and (compress\$4 reduc\$5) with rule) and insufficient with (space or memory)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:07

16	1	insufficient with (space or memory storage) with (file or document) with (compress\$5 and reduc\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:08
17	21	insufficient with (space or memory storage) with (file or document) with (compress\$5 reduc\$5).	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14
18	4	insufficient with (space or memory storage) with (file or document) with (compress\$5 reduc\$5) and rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14
19	5	insufficient with (space or memory storage) with (file or document) with (compress\$5 reduc\$5) and (rule\$3 criter\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/14 17:14

Set	Items	Description
S1	3460150	BACKUP? OR BACK?() (UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2	100373	S1(3N) (FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJECT?)
S3	2629455	RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC? OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4	4516155	SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATION? OR RESOURCE?
S5	545650	POINTER? OR LINK? OR VIRTUAL() (FILE? OR OBJECT?)
S6	13199	S2 AND S3
S7	6240	S6 AND S4
S8	302	S7 AND S5
S9	63253	S3(2N) (MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VARIOUS OR VARIET?)
S10	22	S8 AND S9
S11	267	S7 AND S9
S12	32	S11 AND IC=G06F-015?
S13	11	S11 AND IC=G06F-012?
S14	62	S10 OR S12 OR S13
S15	49	S14 AND IC=G06F?
S16	45	S15 NOT AD=20001016:20021016
S17	45	S16 NOT AD=20021016:20040510

File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)
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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200428
(c) 2004 Thomson Derwent

17/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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06168640 **Image available**
DATA COMPRESSOR

PUB. NO.: 11-110187 [JP 11110187 A]
PUBLISHED: April 23, 1999 (19990423)
INVENTOR(s): MANBA OSAMU
APPLICANT(s): SHARP CORP
APPL. NO.: 09-264457 [JP 97264457]
FILED: September 29, 1997 (19970929)
INTL CLASS: G06F-005/00 ; G06F-017/21 ; H03M-007/40

ABSTRACT

PROBLEM TO BE SOLVED: To **speed** up the retrieval of a dictionary for **data compression** while suppressing the increase of storage capacity, by adding the information of **links** to the nodal points of **plural levels** to the respective nodal points of the dictionary and performing the retrieval of the dictionary while using the added **link** information as well.

SOLUTION: A data line terminating device 21 is provided with a mutual connection circuit 24 with a data terminating device 22, a signal converting part 25 with a public telephone network 23, a control part 26 for internal control, an error correcting part 27 for error correction, and a **data compressing** part 28 for **compressing** /extending **data** . The **data compressing** part 28 is provided with a dictionary 29 in a tree structure, a dictionary retrieving means 30, and a **link** adding means 31. The information of **links** to the nodal points at **plural levels** is added to the respective nodal points of the dictionary 29, and the dictionary 29 is retrieved by the dictionary retrieving means 30 while using the added **link** information as well. When adding input data to the dictionary 29, the **link** adding means 31 adds the information of **links** to the nodal points at the **plural levels** within the predetermined range.

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17/5/6 (Item 6 from file: 347)
DIALOG(R) File 347:JAPIO
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04213040 **Image available**
MULTI-MEDIA DATA BASE DEVICE

PUB. NO.: 05-204740 [JP 5204740 A]
PUBLISHED: August 13, 1993 (19930813)
INVENTOR(s): MASUMOTO RYUICHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 04-010673 [JP 9210673]
FILED: January 24, 1992 (19920124)
INTL CLASS: [5] G06F-012/00 ; H04N-001/00; H04N-001/21
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 44.7
(COMMUNICATION -- Facsimile)
JOURNAL: Section: P, Section No. 1649, Vol. 17, No. 634, Pg. 85,
November 24, 1993 (19931124)

ABSTRACT

PURPOSE: To shorten communication **time** at the **time** of registering **data**, to **reduce** communication loads, to shorten storage **time** at the **time** of storing data and to save areas required for preserving data.

CONSTITUTION: Data respectively prepared by respective basic data preparing means 301-304 for various media such as audio, image, video, numerical and character or the like are **compressed** by **data compression** means 306-309 for respective media selected by a **data compression** method selecting means 305, transmitted to a host computer by a data communicating means 310 and stored in a multi-media data base 312 on the host computer. Thus, **data** are **compressed** by an optimum compression means corresponding to the data **characteristics** of **various** media.

17/5/7 (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
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04192055 **Image available**
DATA COMPRESSING DEVICE AND DATA EXPANDING DEVICE

PUB. NO.: 05-183755 [JP 5183755 A]
PUBLISHED: July 23, 1993 (19930723)
INVENTOR(s): TAKEHARA HIDEKI
SUGAWARA TAKAYUKI
APPLICANT(s): VICTOR CO OF JAPAN LTD [000432] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 03-360619 [JP 91360619]
FILED: December 27, 1991 (19911227)
INTL CLASS: [5] H04N-001/41; **G06F-015/66** ; H03M-007/30; H04N-007/13
JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile); 42.4 (ELECTRONICS -- Basic
Circuits); 44.6 (COMMUNICATION -- Television); 45.4
(INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: E, Section No. 1456, Vol. 17, No. 601, Pg. 99,
November 04, 1993 (19931104)

ABSTRACT

PURPOSE: To compress a picture including a halftone with a high compression **rate** and high quality by calculating the run length of intermediate value data which is continuous between specified **levels** so as to make it into a run length code.

CONSTITUTION: Picture data where characters are superimposed is inputted to a pre-processing part 110. The output side of the pre-processing part 110 is connected to the input side of a run length counter 112 and the output side of the run length counter 112 is connected to the input side of a run length encoding part 114. The output side of the run length encoding part 114 is connected to the input side of a Huffman encoding part 116. Here, data of the specified **level** is made into the run length code and only the run length of intermediate value data is made into the run length code and compressed. An intermediate value is interpolatively generated from the run length of intermediate value data with the **plural** specified **levels** as reference so as to be extended. The interpolation can be a gamma interpolation without limiting to a linear interpolation.

17/5/10 (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

03854718 **Image available**
ADAPTIVE **DATA** **COMPRESSION** SYSTEM

PUB. NO.: 04-219818 [JP 4219818 A]
PUBLISHED: August 10, 1992 (19920810)
INVENTOR(s): OKAMURA TOSHIHIKO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 02-418912 [JP 90418912]
FILED: December 19, 1990 (19901219)
INTL CLASS: [5] **G06F-005/00** ; **G06F-015/20**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);
45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1458, Vol. 16, No. 568, Pg. 114,
December 09, 1992 (19921209)

ABSTRACT

PURPOSE: To use the tree structure of a dictionary to realize LRU(least recently used) deletion heuristics and to offer the adaptive **data compression** system which flexibly handles data having **various characteristics** .

CONSTITUTION: The dictionary 2 wherein reference numbers are given to part series of an input series is generated and when the same part series appears again, its reference number is outputted to register the extended series of the part series in the dictionary 2. At this **time** , the maximum value of the number of part series registered in the dictionary 2 is set previously and when the dictionary 2 becomes full, older part series are deleted by using the tree structure of the dictionary 2 to register new part series in obtained spaces.

17/5/11 (Item 11 from File: 347)
DIALOG(R) File 347:JAPIO
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03577273 **Image available**
IMAGE DATA COMPRESSING SYSTEM

PUB. NO.: 03-240173 [JP 3240173 A]
PUBLISHED: October 25, 1991 (19911025)
INVENTOR(s): NAKANO YASUHIKO
YOSHIDA SHIGERU
OKADA YOSHIYUKI
CHIBA HIROTAKA
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 02-035583 [JP 9035583]
FILED: February 16, 1990 (19900216)
INTL CLASS: [5] G06F-015/66 ; H04N-001/413
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 44.7
(COMMUNICATION -- Facsimile)
JOURNAL: Section: P, Section No. 1302, Vol. 16, No. 28, Pg. 110,
January 23, 1992 (19920123)

ABSTRACT

PURPOSE: To attain a high compression ratio by applying the pre-processing to the image data having **different** statistic **characteristics** and converting the pre-processed image data into a data train that can be easily compressed with a bias based on the transition probability of the pre-processed intermediate data.

CONSTITUTION: A pre-processing means 10 is provided together with an intermediate code conversion means 12, and a compressing/coding means 14. The pre-processing is applied so that plural vertical lines of the image data are collectively converted into the intermediate codes of the fixed length consisting of a set of a bit pattern and the pattern **duration**. Then a histogram is produced for the emerging frequency of the pattern transition produced between the contiguous codes of an intermediate code train. Then only the intermediate code having a transition pattern easily produced is replaced with a specific pattern, and the intermediate codes having the transition patterns not easily produced are outputted as they are. Finally a converted code train to be coded at the present **time** point is compressed and coded by the means 14 as a reproduction obtained from a converted code train already coded. Thus it is possible to effectively **compress** the **data** despite the mixture of image data having **different** statistic **characteristics**. Then the **data** quantity can be **reduced**.

17/5/19 (Item 1 from File: 350)
DIALOG(R) File 350:Derwent WPIX
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015291397 **Image available**
WPI Acc No: 2003-352330/200333
XRPX Acc No: N03-281379

Data storage method for enterprise, involves summarizing previously summarized data structures into coarser data structures, where degree of coarseness of summarized data structures increase with age of raw data points

Patent Assignee: BMC SOFTWARE INC (BMCS-N)
Inventor: AGRAWAL S; HAFEZ A; ROCCO J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6513065	B1	20030128	US 99262194	A	19990304	200333 B

Priority Applications (No Type Date): US 99262194 A 19990304

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6513065	B1	31	G06F-015/173	

Abstract (Basic): US 6513065 B1

NOVELTY - The raw data points comprising measurements of one or more computer system **resources**, are summarized into summarized data structures which are further summarized into coarser data structures. The above process is repeated, as new raw data points are received, to create further coarser summarized data structures. The degree of coarseness of the summarized data structures increase with the age of the raw data points.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) system for storing data regarding one or more computer systems in enterprise; and
- (2) memory medium storing data storage program.

USE - For storing data regarding one or more computer systems that are connected to network such as LAN and WAN in enterprise.

ADVANTAGE - By providing **multiple levels** of summaries, where the data becomes coarser in granularity, the **file size is reduced**. Also the process state changes are preserved at each **level** of summarization, hence the record of a particular process is never totally lost.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram illustrating the summarization with three **levels** of granularity.
pp; 31 DwgNo 12/16

Title Terms: DATA; STORAGE; METHOD; SUMMARY; DATA; STRUCTURE; COARSE; DATA; STRUCTURE; DEGREE; COARSE; DATA; STRUCTURE; INCREASE; AGE; RAW; DATA; POINT

Derwent Class: T01; U14

International Patent Class (Main): **G06F-015/173**

File Segment: EPI

17/5/24 (Item 6 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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013254606 **Image available**
WPI Acc No: 2000-426489/200037
XRPX Acc No: N00-318116

Data back - up procedure for backing up data of file involves
setting common priority level to several files simultaneously and
searching and backing up files with common priority level

Patent Assignee: NIPPON DENKI ENG KK (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000148562	A	20000530	JP 98327566	A	19981118	200037 B

Priority Applications (No Type Date): JP 98327566 A 19981118

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2000148562	A		9 G06F-012/00	

Abstract (Basic): JP 2000148562 A

NOVELTY - The common priority level is set to several files
simultaneously and the files that have the common priority level are
searched and backed up in a priority-level setting process. The back
- up of the duplicate file is prevented in a back-up process.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:

(a) a data back - up apparatus using the data back - up
procedure;

(b) and a computer-readable recording medium in which a data
back - up program is recorded.

USE - For backing up data of file to which priority level
is added.

ADVANTAGE - Allows common priority level to be set for several
files simultaneously, thus improving input operation. Shortens back-up
processing time and reduces required back-up capacity since back -
up of duplicate file is prevented.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the
back - up process in the data back - up procedure.

pp; 9 DwgNo 1/5

Title Terms: DATA; BACK-UP; PROCEDURE; BACKING; UP; DATA; FILE; SET; COMMON
; PRIORITY; LEVEL ; FILE; SIMULTANEOUS; SEARCH; BACKING; UP; FILE;
COMMON; PRIORITY; LEVEL

Derwent Class: T01

International Patent Class (Main): G06F-012/00

International Patent Class (Additional): G06F-012/16

File Segment: EPI

17/5/28 (Item 10 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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012511721 **Image available**
WPI Acc No: 1999-317827/199927
XRPX Acc No: N99-238049

Data **communication** compression **apparatus** for portable information
terminal e.g. PC - adds **link** information corresponding to node of
different levels in predetermined range during amendment of input data
to dictionary

Patent Assignee: SHARP KK (SHAF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11110187	A	19990423	JP 97264457	A	19970929	199927 B

Priority Applications (No Type Date): JP 97264457 A 19970929

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11110187	A	10	G06F-005/00	

Abstract (Basic): JP 11110187 A

NOVELTY - **Link** information is added on node of **different levels** to each node of a dictionary. A dictionary search unit (30) uses added **link** information to search the dictionary. An addition unit (31) adds **link** information corresponding to node of **different level** in a predetermined range, during amendment of input data to the dictionary. DETAILED DESCRIPTION - Encoding of a partial row of an input data is performed by searching a dictionary (29) which has a tree structure having **link** information and existence information for every node.

USE - In portable information terminal e.g. PC, work station in public telephone network.

ADVANTAGE - Improves **speed** of calculating unit. Suppresses increase in power consumption and memory capacity of dictionary. Performs data communication easily with high transmission **rate**. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of one form of **data compression** apparatus. (29) Dictionary; (30) Dictionary search unit; (31) Addition unit.

Dwg.1/7

Title Terms: DATA; COMMUNICATE; COMPRESS; APPARATUS; PORTABLE; INFORMATION; TERMINAL; ADD; **LINK** ; INFORMATION; CORRESPOND; NODE; **LEVEL** ; PREDETERMINED; RANGE; AMEND; INPUT; DATA; DICTIONARY

Derwent Class: T01; U21

International Patent Class (Main): **G06F-005/00**

International Patent Class (Additional): **G06F-017/21** ; H03M-007/40

File Segment: EPI

17/5/34 (Item 16 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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009306527 **Image available**
WPI Acc No: 1992-433936/199252
Related WPI Acc No: 1997-086981
XRPX Acc No: N92-331142

Multiple level data compression for storage or transmission -
connects processors with associated memory in series such that output of
one processor is input to next processor to analyse serially input data

Patent Assignee: TRIADA LTD (TRIA-N)

Inventor: BUGAJSKI J M; RUSSO J T

Number of Countries: 018 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9222141	A1	19921210	WO 92US3932	A	19920511	199252 B
US 5245337	A	19930914	US 91706949	A	19910529	199338
US 5293164	A	19940308	US 91706949	A	19910529	199410
			US 92978360	A	19921118	
EP 588921	A1	19940330	EP 92913110	A	19920511	199413
			WO 92US3932	A	19920511	
JP 6508456	W	19940922	WO 92US3932	A	19920511	199442
			JP 93500423	A	19920511	
EP 588921	A4	19950419	EP 92913110	A		199613
JP 3217781	B2	20011015	WO 92US3932	A	19920511	200167
			JP 93500423	A	19920511	

Priority Applications (No Type Date): US 91706949 A 19910529; US 92978360 A
19921118

Cited Patents: 01Jnl.Ref; US 4064489; US 5006849; WO 8809586

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9222141 A1 E 33 H03M-007/30

Designated States (National): CA JP

Designated States (Regional): BE CH DE DK ES FR GB GR IT LI LU MC NL SE

US 5245337 A 8 H03M-007/30

US 5293164 A 9 H03M-007/30

Cont of application US 91706949

Cont of patent US 5245337

EP 588921 A1 E 33 H03M-007/30 Based on patent WO 9222141

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU MC NL
SE

JP 6508456 W G06F-005/00 Based on patent WO 9222141

EP 588921 A4 H03M-007/30

JP 3217781 B2 19 G06F-005/00 Previous Publ. patent JP 6508456

Based on patent WO 9222141

Abstract (Basic): WO 9222141 A

The appts. comprises a number of sequentially ordered memory
levels (24a to 24n), and a number of processors (20a to 20n), each
associated with a memory **level**. The processor associated with the
first memory **level** receives the incoming data stream, and analyses
the stream to detect the occurrence of previously non-occurring
sequences of data elements in the stream. The sequences are stored in
the first memory **level**, and signals are output representative of the
storage location in the first **level** of each sequence of data elements
in the incoming stream.

The processor associated with each sequential memory **level**
receives output signals from the processor associated with the
sequentially lower **level**, detects and stores in its **level**
previously non occurring sequences of data elements and outputs to the
processor associated with the next higher **level** signal representative
of the storage location of its associated memory **level** of each
sequence of data elements in its incoming signal.

ADVANTAGE - Each processor provides single storage location output
signal for each input pair of elements and maintains count of
occurrences of each pair.

Set	Items	Description
S1	3059835	BACKUP? OR CODEC? ? OR BACK?() (UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2	180573	S1(3N) (FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJECT?)
S3	5277904	RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC? OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4	8381563	SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATION?
S5	1223079	POINTER? OR LINK? OR VIRTUAL() (FILE? OR OBJECT?)
S6	133631	S3(2N) (MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VARIOUS OR VARIET?)
S7	4452712	SPACE? OR MEMOR? OR ROM OR MEGABYT? OR RAM OR STORAGE? OR - RESOURCE?
S8	111490	S4(2N) (CALCULAT? OR ESTIMAT? OR PREDICT? OR FORECAST? OR ALGORITHM? OR FORMULA?)
S9	0	S2(10N) S6(10N) S8
S10	637	S2(S) S6
S11	504	S2(S) S8
S12	2	S10(S) S11
S13	143	S11(S) S7
S14	200	S10(S) S7
S15	140	S2(10N) (S6 OR S8) (10N) S7
S16	46	S2(5N) (S6 OR S8) (5N) S7
S17	48	S16 OR S12
S18	34	RD (unique items)
S19	29	S18 NOT PY>2000
S20	29	S19 NOT PD=20001016:20021016
S21	29	S20 NOT PD=20021016:20040505
File 160:Gale Group PROMT(R) 1972-1989		
(c) 1999 The Gale Group		
File 621:Gale Group New Prod. Annou. (R) 1985-2004/May 07		
(c) 2004 The Gale Group		
File 813:PR Newswire 1987-1999/Apr 30		
(c) 1999 PR Newswire Association Inc		
File 674:Computer News Fulltext 1989-2004/May W1		
(c) 2004 IDG Communications		
File 275:Gale Group Computer DB(TM) 1983-2004/May 10		
(c) 2004 The Gale Group		
File 148:Gale Group Trade & Industry DB 1976-2004/May 10		
(c) 2004 The Gale Group		
File 9:Business & Industry(R) Jul/1994-2004/May 07		
(c) 2004 The Gale Group		
File 810:Business Wire 1986-1999/Feb 28		
(c) 1999 Business Wire		

21/3,K/2 (Item 2 from File: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
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01406929 Supplier Number: 46559116 (USE FORMAT 7 FOR FULLTEXT)
**Premenos Acquires Financial Transaction Security Software Company; Expands
Electronic Commerce Security Products to Banking and Financial
Industries.**

Business Wire, p07220009

July 22, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 891

... costs of EDI and many other file types and transactions using
state-of-the-art **compression algorithms**. **File transfer times** and
storage amounts are typically **reduced** 50 to 80 percent. It may be
integrated into any applications level program and is...

21/3,K/9 (Item 4 from File: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01709008 SUPPLIER NUMBER: 16173301 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Using smart systems to save the environment. (includes bibliography)
Markowitz, Judith
AI Expert, v9, n11, p32(7)
Nov, 1994
ISSN: 0888-3785 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2777 LINE COUNT: 00253

... be handled. The TWC system flags all incompatibilities and substances requiring special treatment. It also **calculates timetables** and **backup storage** requirements. TWC staff who evaluate and prepare hazardous waste **storage** and processing permits view the KBS as an effective, time-saving tool.

[CHART OMITTED]

One...

21/3,K/28 (Item 1 from file: 810)
DIALOG(R)File 810:Business Wire
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0604687 BW0125

STORAGE TECHNOLOGY: Queensland, Australia, data center project targets million-dollar oil exploration markets; StorageTek PowderHorn, RedWood, TimberLine provide up to 300 terabytes of storage for seismic data

July 17, 1996

Byline: Business Editors

...technologies as they become available, transparently supporting access to data on both new and old **storage** systems. It also needed to provide **multiple levels** of data **storage** to allow a range of lower-cost **storage** and to **back up** meta files ."

The system runs the Petrovision databank application from the British company PECC. Development of Petrovision...

Set	Items	Description
S1	4998330	BACKUP? OR CODEC? ? OR BACK?() (UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2	205822	S1(3N) (FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJECT?)
S3	10627256	RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC? OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4	10836751	SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATION?
S5	1181393	POINTER? OR LINK? OR VIRTUAL() (FILE? OR OBJECT?)
S6	347034	S3(2N) (MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VARIOUS OR VARIET?)
S7	4531822	SPACE? OR MEMOR? OR ROM OR MEGABYT? OR RAM OR STORAGE? OR - RESOURCE?
S8	428770	S4(2N) (CALCULAT? OR ESTIMAT? OR PREDICT? OR FORECAST? OR ALGORITHM? OR FORMULA?)
S9	1445	S2 AND S3 AND S8
S10	71	S2 AND S6 AND S8
S11	71	S10 AND (S4 OR S5)
S12	60	RD (unique items)
S13	34	S12 NOT PY>200
File	8: Ei	Compendex(R) 1970-2004/May W1 (c) 2004 Elsevier Eng. Info. Inc.
File	35: Dissertation	Abs Online 1861-2004/Apr (c) 2004 ProQuest Info&Learning
File	202: Info. Sci. & Tech. Abs.	1966-2004/Feb 27 (c) 2004 EBSCO Publishing
File	65: Inside	Conferences 1993-2004/May W2 (c) 2004 BLDSC all rts. reserv.
File	2: INSPEC	1969-2004/May W1 (c) 2004 Institution of Electrical Engineers
File	94: JICST-EPlus	1985-2004/Apr W3 (c) 2004 Japan Science and Tech Corp(JST)
File	111: TGG Natl. Newspaper	Index(SM) 1979-2004/May 10 (c) 2004 The Gale Group
File	233: Internet & Personal	Comp. Abs. 1981-2003/Sep (c) 2003 EBSCO Pub.
File	6: NTIS	1964-2004/May W2 (c) 2004 NTIS, Intl Cpyrghrt All Rights Res
File	144: Pascal	1973-2004/May W1 (c) 2004 INIST/CNRS
File	434: SciSearch(R)	Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	34: SciSearch(R)	Cited Ref Sci 1990-2004/May W1 (c) 2004 Inst for Sci Info
File	99: Wilson Appl. Sci & Tech	Abs 1983-2004/Apr (c) 2004 The HW Wilson Co.
File	95: TEME-Technology & Management	1989-2004/Apr W3 (c) 2004 FIZ TECHNIK

13/5/10 (Item 5 from File: 35)
DIALOG(R) File 35:Dissertation Abs Online
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819384 ORDER NO: AAD83-19202

A PARTITIONED DATA COMPRESSION ALGORITHM

Author: KURIEN, THOMAS

Degree: PH.D.

Year: 1983

Corporate Source/Institution: THE UNIVERSITY OF CONNECTICUT (0056)

Source: VOLUME 44/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1197. 167 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

This thesis introduces a new approach to the design of estimation algorithms. It is applicable to systems which have a special structure and the measurements involve only subsets of the total state vector.

The approach used is to partition the system into subsystems, each containing subsets of the state associated with a particular measurement type. Reduced-order filters are designed for each of these subsystems. A separate full-order filter interacts with these filters to ensure that they maintain close to unbiased (state and covariance) estimates. This full-order filter, in turn, receives **compressed information** from the **reduced**-order filters. The combination of the full-order filter and reduced-order filters has a smaller computational requirement compared to that of the optimal filter. In fact, a systematic design approach is provided wherein a trade-off between accuracy and computational requirements can be made. Computer simulation of the algorithm for typical systems has verified the predicted performance of the algorithms.

The design approach introduced in this thesis also provides a hierarchical structure in the estimation process whereby information is assimilated at different **rates** at **different levels**. As such the algorithm provides valuable insight for the design of multi-level and multi- **rate estimation algorithms** for systems of large dimension.

13/5/17 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

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03965097 INSPEC Abstract Number: B91058125, C91057358

Title: Compression and ranking

Author(s): Goldberg, A.V.; Sipser, M.

Author Affiliation: Dept. of Comput. Sci., Stanford Univ., CA, USA

Journal: SIAM Journal on Computing vol.20, no.3 p.524-36

Publication Date: June 1991 Country of Publication: USA

CODEN: SMJCAT ISSN: 0097-5397

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: A complexity-theoretic approach to the classical **data compression** problem is presented. A notion of language compressibility is defined, and it is shown that essentially all strings in a sufficiently sparse 'easy' (e.g., polynomial- **time**) language can be compressed efficiently. A notion of ranking as a form of optimal compression is also defined, and it is shown that some 'very easy' languages (e.g., unambiguous context-free languages) can be ranked efficiently. Languages that cannot be compressed or **ranked** efficiently under **various** complexity-theoretic assumptions are exhibited. The notion of compressibility is closely related to Kolmogorov complexity and randomness. This relationship and the complexity-theoretic implications of the results are discussed. (13 Refs)

Subfile: B C

Descriptors: computational complexity; **data compression**

Identifiers: complexity theory; sparse language; polynomial **time algorithm** ; ranking; **data compression** problem; language compressibility ; strings; optimal compression; unambiguous context-free languages; Kolmogorov complexity; randomness

Class Codes: B6140 (Signal processing and detection); C4240 (Programming and algorithm theory); C1260 (Information theory)

13/5/19 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC
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02213126 INSPEC Abstract Number: A84036509

Title: A test on compression of digital terrain model data

Author(s): Makarovic, B.

Journal: ITC Journal no.2 p.133-8

Publication Date: 1983 Country of Publication: Netherlands

CODEN: ITCJDP ISSN: 0303-2434

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: An outline is presented of a method for **data compression**, including the results of the corresponding experimental tests. The method is suitable for hierarchically structured grid data, and it uses the second difference criterion in each **level**. **Several** variants of the method are outlined. Experimental tests were carried out by means of a Gestalt DTM of mountainous terrain and using a one-dimensional operator. Different thresholds were applied to second differences and the corresponding losses of accuracy and compression **rates** were **estimated**. By adjusting the threshold, both quality indicators can be tuned. The effectiveness of the method depends mainly on the terrain roughness and the magnitude of threshold. (2 Refs)

Subfile: A

Descriptors: cartography; geodesy; geophysical techniques; photogrammetry ; remote sensing

Identifiers: **data compression** ; geodesy; technique; cartography; photogrammetry; digital terrain model; method; **data compression** ; method ; hierarchically structured grid data; second difference criterion

Class Codes: A9110D (Cartography); A9110L (Photogrammetry); A9365 (Data acquisition and storage); A9385 (Instrumentation and techniques for geophysical research)

13/5/23 (Item 4 from File: 6)

DIALOG(R) File 6:NTIS

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0902226 NTIS Accession Number: AD-A099 758/5/XAB

Observer Performance Measured against Hybrid Compressed Video Imagery

(Technical rept)

Swistak, J. E.

Army Electronics Research and Development Command, Fort Belvoir, VA.
Night Vision and Electro-Optics Labs.

Corp. Source Codes: 057568001; 393889

Report No.: DELNV-TR-0019

Mar 81 19p

Languages: English

Journal Announcement: GRAI8120

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

Country of Publication: United States

A study was conducted in which the effects of bits per pixel reductions on target detection and recognition were measured. A hybrid DCT/DPCM compression algorithm was used to manipulate the bit-per-pixel reduction **rate**. The **algorithm** was implemented in the form of a software simulation package on a general-purpose minicomputer facility. Using this facility, **real-time** imagery was reduced from analog to 8- and 2-bit-per-pixel levels at 1-frame-per-second update **rates**. Observers were asked to detect and recognize targets located in the imagery. Average detection and recognition slant ranges were calculated for each target and compression level. No significant differences in performance were noted due to the **different** compression **levels**. (Author)

Descriptors: Image processing; * **Data compression**; *Video signals; Pulse code modulation; Target detection; Target recognition; Slant range; Bandwidth; Remotely piloted vehicles; Resolution; Discrete fourier transform; Human factors engineering; Visual perception

Identifiers: Pixels; Discrete cosine transform; NTISDODXA; NTISDODXA

Section Headings: 95D (Biomedical Technology and Human Factors Engineering--Human Factors Engineering); 62F (Computers, Control, and Information Theory--Pattern Recognition and Image Processing)

13/5/34 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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00912133 I95079311259

Region-based video coding using mathematical morphology

(Bereichsbasierte Videocodierung mit Hilfe der mathematischen Morphologie)

Salembier, P; Torres, L; Meyer, F; Chuang Gu

Dept. of Signal Theory, Polytech. Univ. of Catalonia, Barcelona, Spain

Proceedings of the IEEE, v83, n6, pp843-857, 1995

Document type: journal article Language: English

Record type: Abstract

ISSN: 0018-9219

ABSTRACT:

This paper presents a region-based coding algorithm for video sequences. The coding approach involves a **time**-recursive segmentation relying on the pixels homogeneity, a region-based motion estimation, and motion compensated contour and texture coding. This algorithm is mainly devoted to very low bit **rate** video coding applications. One of the important features of the approach is that no assumption is made about the sequence content. Moreover the algorithm structure leads to a scalable coding process giving **various levels** of quality and bit **rates**. The coding as well as the segmentation are controlled to regulate the bit stream. Finally, the interest of morphological tools in the content of region-based coding is extensively reviewed.

DESCRIPTORS: IMAGE SEQUENCES; IMAGE CODING; IMAGE SEGMENTATION; SURFACE STRUCTURE; MORPHOLOGY; MOTION ANALYSIS; **DATA COMPRESSION** ; ALGORITHM; IMAGE ELEMENTS; **DATA** SIGNALLING **RATE** ; FRAME TRANSMISSION; IMAGE TEXTURE ; MATHEMATICAL MORPHOLOGY; MOTION COMPENSATION; MOTION ESTIMATION; VIDEO CODING

IDENTIFIERS: RECURSIVE FUNCTIONS; REGION BASED VIDEO CODING; CODING **ALGORITHM** ; VIDEO SEQUENCES; **TIME** RECURSIVE SEGMENTATION; PIXELS HOMOGENEITY; REGION BASED MOTION ESTIMATION; MOTION COMPENSATED CONTOUR; TEXTURE CODING; VERY LOW BIT **RATE** ; BIT STREAM; Bildfolgecodierung; Algorithmus

Set	Items	Description
S1	3460150	BACKUP? OR BACK?() (UP OR UPS) OR ZIP OR ZIPS OR ZIPPING OR ZIPPED OR COMPRESS? OR DECOMPRESS? OR UNCOMPRESS? OR PKZIP? OR PKUNZIP? OR UNZIP? OR REDUC?
S2	100373	S1(3N) (FILE? OR DATA? OR STORAGE? OR INFORMATION? OR OBJECT?)
S3	2629455	RULE? OR CHARACTERISTIC? OR CUSTOMI? OR PREFER? OR DYNAMIC? OR LEVEL? OR MULTILEVEL? OR RANK? OR MULTIRANK?
S4	4516155	SPEED? OR RATE? OR TIME? OR TIMING? OR INTERVAL? OR DURATION? OR RESOURCE?
S5	545650	POINTER? OR LINK? OR VIRTUAL() (FILE? OR OBJECT?)
S6	13199	S2 AND S3
S7	6240	S6 AND S4
S8	302	S7 AND S5
S9	63253	S3(2N) (MULTIPL? OR PLURAL? OR SEVERAL? OR DIFFERENT? OR VARIOUS OR VARIET?)
S10	22	S8 AND S9
S11	267	S7 AND S9
S12	32	S11 AND IC=G06F-015?
S13	11	S11 AND IC=G06F-012?
S14	62	S10 OR S12 OR S13
S15	49	S14 AND IC=G06F?
S16	45	S15 NOT AD=20001016:20021016
S17	45	S16 NOT AD=20021016:20040510
S18	77274	(CALCULAT? OR PREDICT? OR FORECAST? OR FORMULA?) (3N) S4
S19	6	S18 AND S8
S20	5	S19 NOT S17
S21	0	S20 AND IC=G06F?

File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)

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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200428

(c) 2004 Thomson Derwent

20/5/5 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011180767 **Image available**
WPI Acc No: 1997-158692/199715
XRPX Acc No: N97-131026

Image data compression circuit used in observation appts equipped with artificial satellite - has address pointer which outputs pointer value for switching, setting of variable length code corresponding to image block to be encoded

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8289304	A	19961101	JP 9590760	A	19950417	199715 B

Priority Applications (No Type Date): JP 9590760 A 19950417

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8289304	A	11	H04N-007/32	

Abstract (Basic): JP 8289304 A

The circuit performs **data compression** by entropy encoding, using the variable length code which is set up according to the error probability obtained from the brightness **level** prediction value of each pixel of image to be coded. The input image data (1) and the image data delayed by one pixel **time** by a delay part (2) are fed to a differential part (4) which outputs differential image data (5). A code memory (6) which stores variable length codes outputs a **data compression** code corresponding to the input differential data and based on the address specified by an address **pointer** (22). A second memory (14) stores the length of the output **data compression** code. A frame counter (10) forms a fixed frame **timing** and a formatter (12) adds a synchronizing signal to the serial data from a serial-parallel converter (8), according to the frame **timing** and outputs a transmission image frame.

An image divider (16) to which the frame **timing** is input, divides the input image into blocks each consisting of predefined number of pixels. A counter (18) counts the frequency of an error from the prediction value of brightness **level** of each pixel. A distribution estimator (20) selects an error distribution pattern from multiple patterns, based on the counter output. The encoded image block and its length is stored into the higher order address of the area code memory and second memory, respectively, in response to the output result of the estimator. The address **pointer** forms a **pointer** value, which switches the setting of variable length code

USE/ADVANTAGE - For observing earth's surface, sea surface. Changes code setting according to transmitting image and performs efficient encoding. Improves compression **rate** and precision of **prediction**. Avoids complicated processing during receiving and processing encoded data.

Dwg.1/12

Title Terms: IMAGE; DATA; COMPRESS; CIRCUIT; OBSERVE; APPARATUS; EQUIP; ARTIFICIAL; SATELLITE; ADDRESS; POINT; OUTPUT; POINT; VALUE; SWITCH; SET; VARIABLE; LENGTH; CODE; CORRESPOND; IMAGE; BLOCK; ENCODE

Derwent Class: Q25; S02; U21; W04; W06

International Patent Class (Main): H04N-007/32

International Patent Class (Additional): B64G-001/66; H03M-007/42

File Segment: EPI; EngPI